

## 29512 Composite - 1000V UL Flexible Motor Supply Cable



For more Information  
please call

1-800-Belden1



### General Description:

1 pr.(Signal)-16 AWG stranded (26x30) TC cond., XLPE insul., Beldfoil® shield (100% c), drain; 3 cond.(VFD) plus 1 ground wire-12 AWG stranded (65x30) TC cond., XLPE insul., Duofoil® and TC braid Shield (100% a85% c), drain, PVC jacket.

### Usage (Overall)

Suitable Applications: AC Motor Drive, VFD, Variable Frequency Drive

### Twisted Pair

#### Physical Characteristics

##### Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
1	16	26x30	TC - Tinned Copper

##### Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
XLPE - Cross Linked Polyethylene	0.030

Twisted Pair Color Code Chart:

Number	Color
1	Black and White

##### Inner Shield

Inner Shield Material:

Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

Inner Shield Drain Wire AWG:

AWG	Stranding	Conductor Material
18	19x30	TC - Tinned Copper

##### Individual Shield

#### Electrical Characteristics

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
34.000

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
4.000

Nom. Inner Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
4.990

### Multi Conductor

#### Physical Characteristics

##### Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
3	12	65x30	TC - Tinned Copper

##### Ground Wire

Ground Wire (Y/N): Yes

Ground Wire Material:

AWG	Stranding	Conductor Material	Insulation Material
12	65x30	TC - Tinned Copper	PVC - Polyvinyl Chloride

##### Insulation

Insulation Material:

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Insulation Material	Wall Thickness (in.)
XLPE - Cross Linked Polyethylene	0.045

Insulation Color Code Chart:

Number	Color
1	Black #1
2	Black #2
3	Black #3
4	Green/Yellow

### Individual Shield

#### Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100.000
2		Braid	TC - Tinned Copper	85.000

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
12	65x30	TC - Tinned Copper

### Electrical Characteristics

Nom. Inductance:

Inductance (µH/ft)
0.197

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
47.000

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
26.000

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
1.600

### Physical Characteristics (Overall)

#### Conductor

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	0.080

Outer Jacket Ripcord: Yes

#### Overall Cable

Overall Nominal Diameter: 0.895 in.

### Mechanical Characteristics (Overall)

Operating Temperature Range: -40°C To +90°C

Max. Recommended Pulling Tension: 527 lbs.

Min. Bend Radius/Minor Axis: 9 in.

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: RHW-2 Singles, TC-ER

CEC/C(UL) Specification: 600V Type CIC TC

CSA Specification: 1000 V AWM I/II A/B

EU Directive 2011/65/EU (ROHS II): Yes

EU CE Mark: Yes

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 09/21/2006

EU Directive 2002/96/EC (WEEE): Yes

EU Directive 2003/11/EC (BFR): Yes

CA Prop 65 (CJ for Wire & Cable): Yes

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MII Order #39 (China RoHS):	Yes
PMSHA Specification:	P-07-KA070003
Other Specification:	1000V UL Flexible Motor Supply Cable

### Flame Test

UL Flame Test:	UL1685 UL Loading
CSA Flame Test:	FT4
IEEE Flame Test:	1202, IEEE 383 Vertical Tray Flame Test (70,000 BTU)

### Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Burial:	Yes
Sunlight Resistance:	Yes

### Plenum/Non-Plenum

Plenum (Y/N):	No
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### Electrical Characteristics (Overall)

#### Max. Operating Voltage - UL:

##### Voltage

1000 V RMS (Flexible Motor Supply Cable)

#### Max. Operating Voltage - Other:

##### Voltage

1000 V RMS (CSA AWM I/II A/B)

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
29512 010100	100 FT	77.300 LB	BLACK	C	COMPOSITE CABLE SH PVC
29512 0101000	1,000 FT	438.000 LB	BLACK	C	COMPOSITE CABLE SH PVC
29512 0104000	4,000 FT	1,680.000 LB	BLACK	C	COMPOSITE CABLE SH PVC
29512 010500	500 FT	226.500 LB	BLACK	C	COMPOSITE CABLE SH PVC

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 3 Revision Date: 08-20-2013

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